

## SEQUENCE LISTING

<110> CropDesign N.V.  
<120> Stress Tolerance  
<130> 4982-12  
<140> 10/552,686  
<141> 2005-11-21  
<150> PCT/EP04/50513  
<151> 2004-04-13  
<150> EP 03076064.9  
<151> 2003-04-11  
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<170> PatentIn version 3.2

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<212> DNA  
<213> Beta vulgaris

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<211> 224

<212> PRT

<213> Beta vulgaris

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Thr Leu Glu Met Leu Glu Lys Lys Glu Gln Leu Leu Met Lys Lys Ala  
35 40 45

Thr Ala Glu Val Glu Lys Ala Lys Glu Phe Thr Arg Ala Lys Asn Lys  
50 55 60

Arg Ala Ala Ile Gln Cys Leu Lys Arg Lys Arg Leu Tyr Glu Gln Gln  
65 70 75 80

Val Glu Gln Val Gly Asn Phe Gln Leu Arg Ile His Asp Gln Ile Ile  
85 90 95

Met Leu Asp Ser Ala Lys Ala Thr Thr Glu Thr Val Ala Ala Leu Arg  
100 105 110

Ser Gly Ala Ser Ala Met Lys Ala Met Gln Lys Ala Thr Asn Ile Asp  
115 120 125

Asp Val Asp Lys Thr Met Asp Glu Ile Asn Glu Gln Thr Asp Asn Leu  
130 135 140

Arg Gln Ile Gln Glu Ala Leu Ala Thr Pro Val Gly Ala Thr Asp Phe  
145 150 155 160

Asp Glu Asp Glu Leu Glu Ala Glu Leu Glu Glu Leu Glu Gly Ala Glu  
165 170 175

Leu Glu Glu Gln Leu Leu Gln Pro Phe Thr Thr Ala Pro Thr Ala Pro  
180 185 190

Ile His Val Pro Glu Gly Lys Leu Pro Ala Arg Pro Thr Pro Gln Lys  
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<222> (934)..(934)

<223> n is a, c, g, or t

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1341

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<213> Beta vulgaris

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Lys Glu Gln Val Leu Leu Lys Lys Ala Gly Ala Glu Val Glu Lys Ala  
 35 40 45

Lys Glu Phe Thr Arg Ala Lys Asn Lys Arg Ala Ala Ile Thr Cys Leu  
 50 55 60

Lys Arg Lys Arg Leu Tyr Glu Gln Gln Ile Glu Gln Leu Gly Asn Met  
 65 70 75 80

Gln Leu Arg Ile His Asp Gln Met Ile Leu Leu Glu Gly Ala Lys Ala  
 85 90 95

Thr Thr Glu Thr Val Asp Ala Leu Arg Ser Gly Ala Ser Ala Met Lys  
 100 105 110

Ala Met Gln Lys Ala Thr Asn Ile Asp Asn Val Asp Lys Thr Met Asp  
 115 120 125

Glu Ile Asn Glu Gln Thr Glu Asn Leu Lys Gln Ile Gln Glu Ala Leu  
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Ser Ala Pro Ile Gly Ala Ala Ala Asp Phe  
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<223> n is a, c, g, or t
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<223> n is a, c, q, or t
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Lys Ala Glu Lys Leu Lys Val Lys Lys Ala Ile Glu Lys Gly Asn Met  
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 50 55 60



<210> 8  
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<212> PRT  
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Leu Pro Pro Glu Ala Glu Lys Leu Ala Ala Ala Glu Ser Ala Glu Ala  
35 40 45

Glu Lys Pro Ala Asp Ser Ala Glu Ala Lys Ile Ala Gln Gln Val Ser  
50 55 60

Phe Lys Glu Glu Thr Asn Val Ala Ser Glu Leu Pro Glu Leu His Arg  
65 70 75 80

Lys Ala Leu Glu Asp Leu Lys Lys Leu Ile Gln Glu Ala Leu Glu Lys  
85 90 95

His Glu Phe Ser Ser Pro Pro Pro Pro Pro Pro Pro Ala Pro Ala Lys  
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Val Glu Glu Lys Ala Glu Glu Lys Lys Glu Glu Gln Pro Pro Ser Thr  
 115 120 125

Thr Ser Thr Thr Thr Thr Ala Val Ser Asp Glu Val Ala  
130 135 140

Val Ala Pro Pro Ser Glu Glu Ala Pro Lys Thr Asp Glu Ala Ser Pro  
145 150 155 160

Lys Val Glu Glu Glu Pro Ala Lys Ile Val Glu Gln Pro Pro Thr Thr  
 165 170 175

Pro Ala Glu Glu Pro Glu Pro Ala Lys Thr Pro Glu Val Val Val Ala  
                  180                 185                 190

Glu Glu Glu Lys Thr Gly Glu Asp Ile Lys Glu Thr Ile Val Val Glu  
195 200 205

Val Ala Thr Thr Thr Ala Ala Pro Val Leu Thr Glu Pro Glu Ser Val  
210 215 220

Glu Glu Thr Pro Lys Glu Ala Glu Val Val Val Glu Glu Ser Pro Lys  
 225 230 235 240

Glu Pro Glu Glu Val Ser Ile Trp Gly Ile Pro Leu Leu Ala Asp Glu  
 245 250 255

Arg Ser Asp Val Ile Leu Leu Lys Phe Leu Arg Ala Arg Asp Tyr Arg  
 260 265 270

Val Lys Asp Ala Phe Thr Met Ile Arg Asn Thr Ala Arg Trp Arg Lys  
 275 280 285

Glu Phe Glu Val Asp Ser Leu Leu Asp Glu Asp Leu Gly Asn Asp Tyr  
 290 295 300

Glu Lys Val Val Phe Thr His Gly Val Asp Lys Gln Gly Arg Pro Val  
 305 310 315 320

Cys Tyr Asn Val Phe Gly Glu Phe Gln Asn Lys Glu Leu Tyr Gln Asn  
 325 330 335

Thr Phe Ser Asp Ala Glu Lys Arg Lys Lys Phe Leu Arg Trp Leu Ile  
 340 345 350

Gln Phe Leu Glu Lys Thr Ile Arg Thr Leu Asp Phe Ser Pro Glu Gly  
 355 360 365

Ile Asn Ser Phe Val Leu Val Asn Asp Leu Lys Asn Ser Pro Gly Tyr  
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Gly Lys Arg Asp Leu Tyr Lys Val Ile Asp Lys Phe Leu Glu Ile Leu  
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Gln Asp Asn Tyr Pro Glu Phe Ala Ala Lys Gln Leu Cys Ile Asn Val  
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Ser Trp Trp Ser Trp His Thr Thr Gly Ser Ile  
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<211> 504

<212> PRT

<213> Beta vulgaris

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Arg Asn Val Gln Val Cys Ser Arg Val Gly Cys Gly Ser Lys Leu Asn  
35 40 45

Ser Val Lys Asp Ala Lys Val Ser Ser Pro Ser Lys Val Lys Ser Pro  
50 55 60

Lys Thr Pro Phe Arg Ser Ser Ala Gln Gly Lys Glu Thr Ile Gly Ser  
65 70 75 80

Ser Ser Arg Thr Leu Ala Ser Pro Ser Pro Phe Lys Lys Ser Leu Ser  
85 90 95

Asp Arg Lys Lys Leu Pro Ser Asn Leu Asp Thr Asp Ser Glu Met  
100 105 110

Cys Ser Leu Gln Asp Glu Ser Glu Glu Val Ser Gly Lys Thr Arg Ile  
115 120 125

Arg Val Gln Pro Glu Pro Glu Asp His Asp Ser Ile Glu Ala Ser Ser  
130 135 140

Ser Glu Ala Gly Ser Ser Ser Gly Pro Ser Asn Arg Leu Ala Asn  
145 150 155 160

Arg Asn Thr Gln Arg Phe Gly Leu Gly Arg Gln Asp Ser Ala Ala Ser  
165 170 175

Ser Ala Ser Phe Ser Leu Asn Lys Thr Asn Gln Gly Gln Arg Asn Gly  
180 185 190

Gly Gly Gly Ala Ser Ala Asn Arg Tyr Asn Leu Arg Gln Leu Lys  
195 200 205

Cys Asn Ser Ile Ser Asp Val Val Pro Ser Gly Ser Pro Gln Ser Ala  
210 215 220

Glu Ser Ser Leu Ser Lys Lys Arg Asp Thr Gly Cys Arg Lys Arg Asn  
225 230 235 240

Gly Glu Ala Glu Ser Ser Leu Pro Val Arg Gly Lys Lys Ile Asn Gly  
245 250 255

Ala Thr Gln Asp Asp Arg Arg Asn Asp Tyr Pro Asn Arg Gly Ile Ser  
260 265 270

Ile Ser Asp Thr Arg Arg Thr Arg Ser Ser Ser Pro Gly Asn Asn Asp  
275 280 285

Val Thr Ser Val Arg Ser Arg Arg Ser Val Ala Arg Thr Arg Leu Ser  
290 295 300

Asn Gln Asp Thr Arg Asp Arg Leu Pro Leu Val Glu Ser Pro Leu Arg  
305 310 315 320

Asn Pro Ser Ser Pro Leu Pro Glu Ser Ser Thr Gly Gly Thr Asp Phe  
325 330 335

Ser Leu Glu Asn Gln Phe Ser Gly Arg Thr Pro Ala Gly Ser Leu Ser  
340 345 350

Ser Tyr Asn Arg Pro Gly Gly Ser Glu His Met Arg Pro Ser Arg  
355 360 365

Ser Ile Asp Pro Tyr Glu Ala Gly Ile Ala Arg Ser Phe Met Asn Arg  
370 375 380

Asp Thr Leu Arg Gln Tyr Asn Leu Asp Gly Ile Ala Glu Met Leu Leu  
385 390 395 400

Ala Leu Glu Arg Ile Glu Gln Glu Glu Asp Pro Thr Tyr Glu Gln Leu  
405 410 415

Leu Val Leu Glu Thr Asn Leu Phe Leu Gly Gly Leu Ser Phe His Asp  
420 425 430

Gln His Arg Asp Met Arg Leu Asp Ile Asp Asn Met Ser Tyr Glu Glu  
435 440 445

Leu Leu Ala Leu Glu Glu Ser Met Gly Thr Val Arg Gln Pro Cys Gln  
450 455 460

Lys Met Ile Trp Leu Ser Val Leu Lys Gly Thr Ser Thr Arg Val Leu  
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Gln Ile Val Glu Arg Met Ser Met Ile Ser Asn Ala Ala Tyr Ala Arg  
485 490 495

Lys Asn Met Val Ala Gly Lys Lys  
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<210> 11  
<211> 26  
<212> PRT  
<213> Beta vulgaris

<400> 11

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